

# DIGITAL OPTICAL CHEMISTRY MICROMIRROR IMAGER

## ABSTRACT OF THE DISCLOSURE

An apparatus and method for catalyzing a reaction on a substrate (24) comprising, a  
5 light source (12), a micromirror (16) positioned to redirect light (14) from the light source  
(12) toward a substrate (24) wherein the redirected light (14) catalyzes a chemical reaction  
proximate a substrate (24), is disclosed. A computer (18) is connected to, and controls, the  
positioning of mirrors within the micromirror (16) to specifically redirect light to specific  
portions of a substrate. The substrate (24) can be placed in a reaction chamber (50), wherein  
10 the light (14) that is redirected by the micromirror (16) catalyzes a chemical reaction  
proximate a substrate (24).